11th. Reproduction, gemmules, &c. Under this head the ovaries, ova, and gemmular modes of propagation, are described under five heads :—

1st. Ova without an ovarium.

2nd. Ova generated within ovaria.

3rd. Gemmules secreted within the sponge.

4th. Gemmules produced externally.

5th. By spontaneous division of the sarcode.

The remaining portions of the paper, consisting of observations on the generic characters, the specific characters, and on the mode of examination, will form the subject of a future communication.

XVII. "Further Observations upon the Nebulæ, with practical details relating to the Construction of Large Telescopes." By the Earl of Rosse, F.R.S. Received June 5, 1861.

(Abstract.)

In this paper the processes which were found best to answer in casting specula of 6-feet aperture have been described at some length; and the precautions which were taken to prevent accidents during the progressive stages of manufacture.

Some information, which may perhaps be useful, has also been gathered from the memoranda kept on each occasion when the specula were ground and polished; and the results of a long experience in the different manipulations have been put together in a practical form, so as best to enable the civil engineer to undertake the construction of large telescopes as a matter of business.

A few hints have been given on figuring and repolishing large surfaces, which the astronomer may find useful should his services be required in distant countries.

An attempt has been made to define the extreme limits to which telescopic vision may be pushed in this country, in answer to the question whether instruments of greater dimensions might not be advantageously constructed.

The peculiarities in the mounting of the large telescope are slightly noticed, and their advantages and disadvantages explained, as they have been brought out by experience.

This is followed by a selection from the observations made during

a period of six years, accompanied by drawings of the more remarkable objects.

The principal results seem to be a large addition to the list of nebulæ with curved or spiral branches, and many new double and multiple nebulæ. A variety of objects have been also pointed out upon which the labour of a careful scrutiny will probably be amply repaid, with a similar instrument, even in this climate. A still larger number have been marked off, which to save time may be passed by, unless some new views on Cosmogony should suggest sufficient motives for reobserving them. A record has been made, which, to some extent, will be available hereafter for comparison with the heavens, and a few cases of suspected change have been noticed, where the evidence, however, is by no means conclusive.

XVIII. "Observations on the Posterior Lobes of the Cerebrum of the Quadrumana, with a Description of the Brain of a Galago." By WILLIAM H. FLOWER, Esq., Demonstrator of Anatomy at the Middlesex Hospital. Communicated by Dr. SHARPEY, Sec. R.S. Received June 20, 1861.

(Abstract.)

After referring to the present state of our knowledge upon the subject, and especially to the descriptions recently given of the "posterior cornu of the lateral ventricle" and "hippocampus minor" in the Orang-Utang by Dr. Rolleston, in the Chimpanzee by Mr. Marshall, and in *Ateles* by Mr. Huxley, and the statements of M. Gratiolet, that the posterior cornu of the lateral ventricle or "*cavité ancyroïde*" obtains an enormous development in Monkeys, the author proceeds to detail his own observations (which are illustrated by drawings and photographic representations) upon the condition of these parts in the brains of animals belonging to the three families of the order *Quadrumana*.

Family 1. CATARRHINA.

Orang-Utang (*Pithecus satyrus*).—An account is given of the examination of the brain of a young female of this species, preserved in the Middlesex Hospital Museum. The posterior lobes of the cerebral hemispheres were so far developed that they completely covered the cerebellum, although not prolonged backwards to quite